



WP12 Closing Remarks

Peter.mcintosh@stfc.ac.uk Nicoleta.baboi@desy.de Juliette.plouin@cea.fr

8 - 9th April 2015 WP12 2nd Annual Review Meeting, DESY



EuCARD-2 is co-funded by the partners and the European Commission under Capacities 7th Framework Programme, Grant Agreement 312453



- Many thanks to our DESY hosts for the excellent hospitality!
 - Nicoleta, Ruth and Reinhard particularly.
 - Plus all of the DESY tour guides it's really impressive to see the progress being made for XFEL!



- Many thanks to all Task Leaders and Speakers for a series of really impressive talks!
- Really enjoyed this second review and the fact we are already generating significant results!





Impressive Progress!

- Task 12.2 SRF Thin Films
 - First Nb3Sn samples generated at CERN, refined deposition procedure being developed.
 - Plasma Enhanced ALD process with improved thermal budget demonstrated with AIN @ INP.
 - QPR tested to high Hpk @ JLab, tests being confirmed at HZB, microphonics issues to be resolved, first test samples to be prepared.
 - First magnetometer system tests performed @ CEA with promising results for both single and multi-layers, error sources being evaluated.
- Task 12.3 High Gradient NC
 - CLIC crab cavity high power tested by ULAN to almost 2 times its design gradient with very low breakdown performance.
 - High efficiency benchmarked 'kladistron' design developed by CEA, >65% efficiency predicted, prototype being developed with Thales.
 - First high-resolution, WFM electronics prototype tested by PSI achieving 14um resolution, preparing system for SwissFEL.
- Task 12.4 SRF HOM Diagnostics
 - HOM diagnostic resolution analysis identifying performance limits performed by UMAN/DESY, refinement underway.
 - Fully integrated cascaded model developed by UROS, results look very promising.
- Task 12.5 RF Photocathodes
 - High QE performance Cu and Nb thin film photo-cathodes deposited and characterised at STFC.
 - Improved evaporation deposition process used by NCBJ to the second secon **Monographs:** cavity tests at DESY.
 - First SRF cavity tests at DESY showed impressive pk-field **Task 12.3 proposed by B Wooley (ULAN)** underway.

Task 12.4 submitted by T Fligsen (UROS)



- Even more Phd and post-doc students providing high impact in a number of areas.
- First Phd students about to qualify:
 - Thomas Fligsen (UROS)
 - Ben Wooley (ULAN)
- Our results now generating journal publications, Accelerating News articles and Monographs:
 - Keep up the excellent work!



- Many thanks to all for a very productive and enjoyable review!
- Looking forward to seeing many of you again for EUCARD-2 Annual Review in April @ ALBA.
- Have a safe journey home!



